



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/429,716	10/29/1999	STANLEY T. NAUDUS	99.096	6241

7590

09/10/2003

MCDONNELL BOEHNEN HULBERT  
AND BERGHOFF  
32ND FLOOR  
300 SOUTH WACKER DRIVE  
CHICAGO, IL 60606

EXAMINER

HO, CHUONG T

ART UNIT

PAPER NUMBER

2664

DATE MAILED: 09/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.  
**09/429,716**Applicant(s)  
**Naudus, et al.**Examiner  
**Ho**Art Unit  
**2664**

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE three MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 7-12, 14, 16-20, and 22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claims 3-6, 13, 15, 21, 23, and 24 are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some\* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_ 6) ☐ Other:

Art Unit: 2664

1. Claims 1-24 are pending .

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 1, 17 are rejected under 35 U.S.C. 102(e) as being anticipated by Naudus (U.S. Patent No. 6,259,691 B1).

In the claims 1, 17, Naudus discloses a first network interface device (50a, 50 b, 50c) for communicating with a first network (32, PSTN) having a first protocol type, where the first network interface device has a first interface terminal for coupling to the first network and a second network (internet), and where the first network device is configured to perform processing for the first protocol type for data packets exchanged between the first and second interface terminals for the first network device (see figure 2, col. 2, lines 10-67, figure 4, col. 13,

Art Unit: 2664

lines 35-40, col. 15, lines 23-27); a second network interface device (60) for communicating with a second network (internet) having a second protocol type, where the second network interface device has a first interface terminal for coupling to the second network and a second interface terminal coupled to the second interface terminal of the first network device, and where the second network device is configured to perform processing for the second protocol type for a first type of data packet exchanged between the first and second interface terminals of the second network device (see figure 2, col. 2, lines 10-67, figure 4, col. 13, lines 35-40, col. 15, lines 23-27); a third network interface device (I/O 108) for communicating with the second network (internet), where the third network interface device has a first interface terminal for coupling to the second network, a second interface terminal coupled to the second interface terminal of the first network device, and a third interface terminal coupled to the first interface terminal of the second network device, and where the third network device is configured to perform processing for the second protocol type for a second type of data packet exchanged between the first and second interface terminals of the third network device, the third network interface device being further configured to detect reception of the first type of data packet at the first interface terminal of the third network interface device and route the first type of data packet to the third interface terminal of the third network interface device (see figure 2, col. 2, lines 10-67, figure 4, col. 13, lines 35-40, col. 15, lines 23-27).

4. In the claim 17, Naudus discloses a first gateway device for processing data flow between the first network (PSTN) and the network access server; a second gateway device for processing data flow between the first gateway device and the second network (internet); a

Art Unit: 2664

switching device (I/O 108) interposed the second gateway device and the second network (internet) for routing a first type of data packet from the second network (internet) to the second gateway device and for processing a second type of data packet from the second network (internet) and routing the second type of data packet to the first gateway device (see figure 2, col. 2, lines 10-67, figure 4, col. 13, lines 35-40, col. 15, lines 23-27).

5. Claim 10 is rejected under 35 U.S.C. 102(e) as being anticipated by Vaid et al. (U.S. Patent No. 6,078,953).

In the claims 10, 17, see figure 9, Vaid et al. discloses receiving a data packet from a first network; determining whether the data packet has a first protocol type field in a header of the data packet; routing the data packet to a first gateway device (907) for processing when the data packet has the first protocol type field; and routing the data packet to a second gateway device (905) for processing when the data packet does not have the first protocol type field (see figure 9, col. 2, lines 60-65, col. 17, lines 27-37).

6. Claim 10 is rejected under 35 U.S.C. 102(e) as being anticipated by Naudus (U.S. Patent No. 6,259,691 B1).

In the claim 10, Naudus discloses receiving a data packet from a first network; determining whether the data packet has a first protocol type field in a header of the data packet; routing the data packet to a first gateway device for processing when the data packet has the first protocol type field; and routing the data packet to a second gateway device (905) for processing when the data packet does not have the first protocol type field (see figure 4, col. 15, lines 27-30).

Art Unit: 2664

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 2-9, 11, 12, 14, 16, 18, 19, 20, 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Naudus (U.S. Patent No. 6,259,691 B1) in view of Vaid et al. (U.S. Patent No. 6,078,953).

In the claim 2, Naudus et al. discloses the limitations of claim 1 above.

However, Naudus is silent to disclose the first protocol type of the first network is a first real-time sensitive protocol and the second protocol type is a second real-time sensitive protocol configured to route each data packet to a destination address included in each data packet.

Vaid et al. discloses a novel system of managing information at a gateway site for improving quality of service to a network of computers, the system has a step of providing a flow of information to a bandwidth management tool disposed at a server. The flow of information is classified into at least a first portion (TCP) and a second portion (NON-TCP (e.g., IPSEC) (see col. 2, lines 60-65, figure 9); comprising:

- ◆ the first protocol type of the first network is a first real-time sensitive protocol and the second protocol type is a second real-time sensitive protocol configured to route each data

Art Unit: 2664

packet to a destination address included in each data packet (see figure 9, col. 2., lines 60-65, col. 17, lines 27-37).

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Naudus with the teaching Vaid to provide the first protocol type and the second real-time sensitive protocol in order to determine if the packet's protocol field contains one of the identified Ipsec. Therefore, the combined system would have been able to reduce the the call capacity of the gateway device 40 (network access device).

9. In the claim 4, Vaid et al. discloses the first type of data packet is an unencrypted IP data packet the second type of data packet is an encrypted data packet (see col. 2, lines 60-67, col. 17, lines 27-37) .

10. In the claim 5, Vaid et al. discloses the second type of data packet is an Ipsec encrypted data packet (see col. 2, lines 60-67, col. 17, lines 27-37) .

11. In the claim 7, Naudus discloses the second and third interface devices share a predetermined network address on the second network (see figure 2, col. 2, lines 10-67, figure 4, col. 13, lines 35-40, col. 15, lines 23-27).

12. In the claim 8, Naudus discloses a switching device (I/O 108) having a first terminal coupled to the first interface terminal of the third network interface device, a second terminal, and a third terminal coupled to the third interface terminal of the third network interface device, where the switching device is configured to identify the first type of data packet received at the first terminal and route it to the third terminal and identify the second type of data packet received at the first terminal and route it to the second terminal (see figure 2, col. 2, lines 10-67,

Art Unit: 2664

figure 4, col. 13, lines 35-40, col. 15, lines 23-27); and fourth network interface device for processing the second protocol type for the second type of data packet, where the fourth network interface device has a first terminal coupled to the second terminal of the switching device and a second terminal coupled to the second interface terminal of the third network interface device (see figure 2, col. 2, lines 10-67, figure 4, col. 13, lines 35-40, col. 15, lines 23-27).

13. In the claim 9, Naudus discloses the switching device holds a predetermined network address on the second network that is shared by the second and fourth network interface devices (see figure 2, col. 2, lines 10-67, figure 4, col. 13, lines 35-40, col. 15, lines 23-27).

14. In the claim 11, Naudus discloses therein instructions for causing a central processing unit to execute the system (see figure 2, col. 2, lines 10-67, figure 4, col. 13, lines 35-40, col. 15, lines 23-27).

15. In the claim 12, Vaid discloses processing the data packet for a real-time sensitive protocol in the first gateway device (905) (see figure 9, col. 2, lines 60-67, col. 17, lines 27-37); processing the data packet for a security protocol and for the real-time sensitive protocol in the second gateway device (907) (see figure 9, col. 2, lines 60-67, col. 17, lines 27-37).

16. In the claim 14, Naudus discloses routing the data packet to a third gateway device after processing by the first gateway device, where the third gateway device is coupled to a second network; and routing the data packet to the third gateway device after processing by the second gateway device (see figure 2, col. 2, lines 10-67, figure 4, col. 13, lines 35-40, col. 15, lines 23-27).



Art Unit: 2664

17. In the claim 16, Vaid discloses the step of receiving a data packet from a first network includes using a single predetermined address for receiving the data packet from the first network when the data packet has the first protocol type field (Ipsec) in the header of the data packet and when the data packet does not have the first protocol type field in the header of the data packet (see figure 9, col. 2, lines 60-67, col. 17, lines 27-37).

18. In the claim 18, Naudus discloses the network access server has a single predetermined address on the second network (internet) (see figure 2, col. 2, lines 10-67, figure 4, col. 13, lines 35-40, col. 15, lines 23-27).

19. In the claim 19, Vaid discloses the second type of data packet (Ipsec) is an encrypted packet and where the switching device ((903) is configured to decrypt the second type of packet and route the second type of packet to the first gateway (907) device based upon decrypted header information (see figure 9, col. 2, lines 60-67, col. 17, lines 27-37).

20. In the claim 20, Vaid discloses the second type of data packet is an IPsec encrypted packet and where the switching device is configured to perform Ipsec decryption of the second type of packet (see figure 9, col. 2, lines 60-67, col. 17, lines 27-37).

21. In the claim 22, Naudus discloses the switching device (I/O 108) is configured to route the second type of packet to the first gateway device based upon decryp UDP header in the second type of packet (see figure 2, col. 15, lines 23-27, col. 2, lines 10-67, figure 4, col. 13, lines 35-40).

Art Unit: 2664

***Allowable Subject Matter***

22. Claims 3-6, 13, 15, 21, 23-24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Information Disclosure Statement***

23. The information disclosure statement filed 04/10/00 (other documents) fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each U.S. and foreign patent; each publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

***Conclusion***

24. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chuong Ho whose telephone number is (703)306-4529. The examiner can normally be reached on Monday-Friday from 9am to 3pm.

25. If attempt to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington, Chin, can be reached on (703)305-4633.

Any inquiry of a general nature or relating to the status of this application or proceeding should be direct to the group receptionist whose telephone number is (703) 305-3900.

CH

Date 09-04-03 .

